No.



9900135

### THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

# Nirginia Agricultural Experiment Station

MICCOL THERE HAS BEEN PRESENTED TO THE

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HERBUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN SUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY ACTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'MFS-553'

In Testimony Mexect, I have hereunto set my hand and caused the seal of the Hint Harriety Protection Office to be affixed at the City of Washington, D.C. this fifth day of Tebruary, in the year two thousand two.

Allest

Palm. Juhne

Commissioner
Plant Variety Protection Office
I. I. 1900 III.

Agriculture

REPRODUCE LOCALLY. Include form number a  U.S. DEPARTMENT OF AG		The College of the Co	FORM APPROVED - OMB N
AGRICULTURAL MARKETIN SCIENCE DIVISION - PLANT VARIETY	G SERVICE	The following statements are n 1974 (5 U.S.C. 552a).	lade in accordance with the ,
APPLICATION FOR PLANT VARIETY P		Application is required in order certificate is to be issued (7 U.	to determine if a plant vari S.C. 24211 Information is he
Unstructions and information collection b		until certificate is issued (7 U.S.	
1. NAME OF APPLICANT(S) les it is to appear on the Certificate		2. TEMPORARY DESIGNATION OR	3. VARIETY NAME
Virginia Agricultural Experime	ent Station	EXPERIMENTAL NUMBER	
·		V93-0386	MFS-553
· '	5		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZII	P Code, and Country	F Trispunis 5 ( )	
College of Ag. and Life Science		5. TELEPHONE (include eree code)	FOR OFFICIAL USE
Virginia Polytechnic Institute	e & State Univ	540-231-6336	1 (1)
Blacksburg, VA 24061			
		6. FAX finclude area code)	DATE
		540-231-4163	1 /0 /000
. GENUS AND SPECIES NAME			6 //6/77
Glycine max	B. FAMILY NAME (Bota		FILING AND EXAMINATION
ory care max	Leguminosen	E	[i* 2450 °
CROP KIND NAME (Common name)			E DATE
Soybeans		ę	
IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM	OF ORGANIZATION (A		C CERTIFICATION FEE
Agricultural Experiment Statio	(1)	ичр, association, etc.) (Common name)	1.320.00
. IF INCORPORATED, GIVE STATE OF INCORPORATION	** <u> </u>	12. DATE OF INCORPORATION	
		,	E DATE 0
NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S),	····	<u> </u>	14/18/
Glenn R. Buss Crop & Soil Environmental Scien Virginia Polytechnic Institute Blacksburg, VA 24061-0404	nces Dept. & State Univ.		540-231-9788 16. FAX (include area code)
Crop & Soil Environmental Scientification Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI	& State Univ.		
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIR    Exhibit A. Origin and Breeding History of the Variety	& State Univ.		15. FAX (include area code)
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI   DE Exhibit A. Origin and Breeding History of the Variety  B. DE Exhibit B. Statement of Distinctness	& State Univ.		15. FAX (include area code)
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI   Exhibit A. Origin and Breeding History of the Variety  Exhibit B. Statement of Distinctness  C. DE Exhibit C. Objective Description of the Variety	& State Univ.		15. FAX (include area code)
Crop & Soil Environmental Scienting Polytechnic Institute Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI  a. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit D. Additional Description of the Variety	& State Univ.  TED (Follow instructions on reverse)		15. FAX (include area code)
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI  a. Exhibit A. Origin and Breeding History of the Variety  b. Exhibit B. Statement of Distinctness  c. Exhibit C. Objective Description of the Variety  d. Exhibit D. Additional Description of the Variety  e. Exhibit E. Statement of the Basis of the Applicant's Own	& State Univ.  TTED (Follow instructions on reverse)		15. FAX (include area code) 540-231-3431
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI  a. Exhibit A. Origin and Breeding History of the Variety  b. Exhibit B. Statement of Distinctness  c. Exhibit C. Objective Description of the Variety  d. Exhibit D. Additional Description of the Variety  e. Exhibit E. Statement of the Basis of the Applicant's Own  f. Voucher Sample 12,500 viable untreated seeds or, for the sample 12,500 viable untreated seeds or the sample 12,500 viable untreated se	& State Univ.  TTED (Follow instructions on reverse)  where the properties of the properties of the title of the properties of the title of the properties of the title of the	issue culture will be deposited and maintain	15. FAX (include area code) 540-231-3431
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIC A. Digin and Breeding History of the Variety b. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit D. Additional Description of the Variety e. Exhibit E. Statement of the Basis of the Applicant's Own f. Voucher Sample 12,500 viable untreated seeds or, for a g. If Filing and Examination Fee (\$2,450), made payable to a DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY	& State Univ.  TTED (Follow instructions on reverse)  wherethip  tuber propagated varieties verification that ti	(PO)	16. FAX (include area code) 540-231-3431
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI  a. Exhibit A. Origin and Breeding History of the Variety  b. Exhibit B. Statement of Distinctness  c. Exhibit C. Objective Description of the Variety  d. Exhibit D. Additional Description of the Variety  e. Exhibit E. Statement of the Basis of the Applicant's Own  f. Voucher Sample 12,500 viable untreated seeds or, for a constitution of the Variety  ODES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY  TYES 01 "yes," answer items 18 and 19 below!	& State Univ.  TTED (Follow instructions on reverse)  The order propagated varieties verification that to the United States (Mail to PV)  BE SOLD BY VARIETY NAME ONLY, AS A SOLD BY VARIETY NAME ONLY, AS A	(PO) A CLASS OF CERTIFIED SEED? (See Section to item 20)	16. FAX (include area code)  540-231-3431  ed in a public repository)  on 83(a) of the Plant Variety Protects
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI  a. Exhibit A. Origin and Breeding History of the Variety  b. Exhibit B. Statement of Distinctness  c. Exhibit C. Objective Description of the Variety  d. Exhibit D. Additional Description of the Variety  e. Exhibit E. Statement of the Basis of the Applicant's Own  f. Voucher Sample 12,500 viable untreated seeds or, for a complete of the Samination Fee (\$2,450), made payable to a complete of the Samination Fee (\$2,450), made pay	& State Univ.  TTED (Follow instructions on reverse)  The order propagated varieties verification that to the United States (Mail to PV)  BE SOLD BY VARIETY NAME ONLY, AS A SOLD BY VARIETY NAME ONLY, AS A	(PO) A CLASS OF CERTIFIED SEED? (See Section to item 20)	16. FAX (include area code)  540-231-3431  ed in a public repository)  on 83(a) of the Plant Variety Protects
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI  a. Exhibit A. Origin and Breeding History of the Variety  b. Exhibit B. Statement of Distinctness  c. Exhibit C. Objective Description of the Variety  d. Exhibit D. Additional Description of the Variety  e. Exhibit E. Statement of the Basis of the Applicant's Own  f. Voucher Sample 12,500 viable untreated seeds or, for a constitution of the Company of the Com	**No fit "no," go:  BE LIMITED AS TO NUMBER OF 18.	PO)  A CLASS OF CERTIFIED SEED? (See Section to item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS	15. FAX (include area code)  540-231-3431  and in a public repository)  OF PRODUCTION BEYOND BREEDING  CERTIFIED
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIC A. Drigin and Breeding History of the Variety B. Exhibit A. Origin and Breeding History of the Variety B. Exhibit B. Statement of Distinctness C. Exhibit C. Objective Description of the Variety D. Additional Description of the Variety C. Exhibit E. Statement of the Basis of the Applicant's Own S. Voucher Sample 12,500 viable untreated seeds or, for a C. Filing and Examination Foe (\$2,450), made payable to DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY TYPES OF "yes," answer items 18 and 19 below!  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY GENERATIONS?  NO.	TIED (Follow instructions on reverse)  Where propagated varieties verification that to the sold by variety name only, as a Sold by variety name of 19.	PO)  A CLASS OF CERTIFIED SEED? (See Section to item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS	15. FAX (include area code)  540-231-3431  and in a public repository)  OF PRODUCTION BEYOND BREEDING  CERTIFIED
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIC A. Drigin and Breeding History of the Variety b. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit C. Objective Description of the Variety c. Exhibit E. Statement of the Basis of the Applicant's Own f. Voucher Sample 12,500 viable untreated seeds or, for a g. Filing and Examination Fee (\$2,460), made payable to DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY GENERATIONS?  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY GENERATIONS?  NO  HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY YES 11 "yes," give names of countries and dates!	**No fit "no," go:  BE LIMITED AS TO NUMBER OF 18.	PO)  A CLASS OF CERTIFIED SEED? (See Section to item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS	15. FAX (include area code)  540-231-3431  and in a public repository)  OF PRODUCTION BEYOND BREEDING  CERTIFIED
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIC A. Origin and Breeding History of the Variety b. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit D. Additional Description of the Variety e. Exhibit E. Statement of the Basis of the Applicant's Own f. Voucher Sample 12,500 viable untreated seeds or, for a confidence of the Sample 12,500 viable untreated seeds or, for a confidence of the Sample 12,500 viable untreated seeds or, for a constitution of the Variety of Filing and Examination Fee (\$2,460), made payable to be seed of the Sample 12,500 viable untreated seeds or, for a constitution of the Variety of the Sample 12,500 viable untreated seeds or, for a constitution of the Variety of Sample 12,500 viable untreated seeds or, for a constitution of the Variety of the Variet	**State Univ.  TTED (Follow instructions on reverse)  Treasurer of the United States* (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  SHO &f *no,* go :  BE LIMITED AS TO NUMBER OF 19.  ETY BEEN RELEASED, USED, OFFERED FOR	PO) A CLASS OF CERTIFIED SEED? (See Section to Item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS R SALE, OR MARKETED IN THE U.S. OR C	15. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  of PRODUCTION BEYOND BREED:  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI  a. Exhibit A. Origin and Breeding History of the Variety  b. Exhibit B. Statement of Distinctness  c. Exhibit C. Objective Description of the Variety  d. Exhibit D. Additional Description of the Variety  e. Exhibit E. Statement of the Basis of the Applicant's Own  f. Voucher Sample 12,500 viable untreated seeds or, for a conditional Description of the Variety  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY  CHECK TYPES, answer Items 18 and 19 below)  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY  GENERATIONS?  ONE MASS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY  GYES If "yes," give names of countries and dates)  United States March 1998	**TTED (Follow instructions on reverse)  **TTED (Follow instructions on revers	PO) A CLASS OF CERTIFIED SEED? (See Section to item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS R SALE, OR MARKETED IN THE U.S. OR C	15. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  of PRODUCTION BEYOND BREED:  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIC A. Digin and Breeding History of the Variety b. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit D. Additional Description of the Variety e. Exhibit E. Statement of the Basis of the Applicant's Own f. Voucher Sample 12,500 viable untreated seeds or, for the property of the Statement of the Basis of the Applicant's Own filling and Examination Fee (\$2,450), made payable to DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY YES OF "yes," answer froms 18 and 19 below)  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY ON STATE OF THIS VARIETY ON STATE OF THIS VARIETY OF STATE OF THIS VARIETY	TTED (Follow instructions on reverse)  Vinership  Luber propagated varieties verification that ti  Treasurer of the United States (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  NO 81 "no," go i  BE LIMITED AS TO NUMBER OF 19.  ETY BEEN RELEASED, USED, OFFERED FOR 19.  Variety will be furnished with application are be deposited in a public repository and main	A CLASS OF CERTIFIED SEED? (See Section item 20)  IF "YES" TO ITEM 18, WHICH CLASSES  FOUNDATION REGISTERS  R SALE, OR MARKETED IN THE U.S. OR Contained will be replenished upon request in accounts in account in accounts in accounts in account in accounts in accounts in accounts in accounts in account in accounts in account in a	16. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  OF PRODUCTION BEYOND BREED  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMI    Exhibit A. Origin and Breeding History of the Variety    Exhibit B. Statement of Distinctness    C. Exhibit C. Objective Description of the Variety    d. Exhibit D. Additional Description of the Variety    e. Exhibit E. Statement of the Basis of the Applicant's Own    f. Voucher Sample 12,500 viable untreated seeds or, for a    g. Filing and Examination Fee (\$2,460), made payable to    DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY    TYES 11 "Yes," answer items 18 and 19 below!  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY    GENERATIONS?    NO  HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY    YES 11 "Yes," give names of countries and dates!  United States March 1998  The applicant(s) declare that a viable sample of basic seed of the applicable, or for a tuber propagated variety a tissue culture will the undersigned applicant(s) is (are) the owner(s) of this account.	TTED (Follow instructions on reverse)  THED (Follow instructions on reverse)  Treasurer of the United States* (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  BE LIMITED AS TO NUMBER OF 19.  THE BEEN RELEASED, USED, OFFERED FOR 19.  NO  Veriety will be furnished with application are be deposited in a public repository and main	A CLASS OF CERTIFIED SEED? (See Section item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS R SALE, OR MARKETED IN THE U.S. OR CO	16. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  OF PRODUCTION BEYOND BREED  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIC A. Digin and Breeding History of the Variety b. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit C. Objective Description of the Variety c. Exhibit E. Statement of the Basis of the Applicant's Own f. Voucher Sample (2,500 viable untreated seeds or, for a g. Filing and Examination Fee (\$2,460), made payable to "DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY YES at "yes," answer items 18 and 19 below!  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY GENERATIONS?  YES Mo  HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY GENERATIONS?  The Applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) applicant(s) and the sample of b	TTED (Follow instructions on reverse)  wherehip  ther propagated varieties verification that to  Treasurer of the United States* (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  NO \$11*no,* go  BE LIMITED AS TO NUMBER OF  19.  THE SEEN RELEASED, USED, OFFERED FOR  NO  Veriety will be furnished with application are be deposited in a public repository and main reproduced or tuber propagated plant variety section 42 of the Plant Variety Protection Ac	A CLASS OF CERTIFIED SEED? (See Section item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS R SALE, OR MARKETED IN THE U.S. OR CO	16. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  OF PRODUCTION BEYOND BREED  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIC A. Drigin and Breeding History of the Variety b. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit C. Objective Description of the Variety c. Exhibit E. Statement of the Basis of the Applicant's Own f. Voucher Sample 12,500 viable untreated seeds or, for a g. Filing and Examination Fee (\$2,460), made payable to DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY GENERATIONS?  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY GENERATIONS?  NO  HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY YES 11 "yes," give names of countries and dates!	TTED (Follow instructions on reverse)  THED (Follow instructions on reverse)  Treasurer of the United States* (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  NO at *no,* go:  BE LIMITED AS TO NUMBER OF  NO  Veriety will be furnished with application are be deposited in a public repesitory and main reproduced or tuber propagated plant variety section 42 of the Plant Variety Protection Accorpardize protection and result in penalties.	A CLASS OF CERTIFIED SEED? (See Section item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS R SALE, OR MARKETED IN THE U.S. OR CO	16. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  OF PRODUCTION BEYOND BREED  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIT A. Digin and Breeding History of the Variety b. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit D. Additional Description of the Variety e. Exhibit E. Statement of the Basis of the Applicant's Own f. Voucher Sample 12,500 viable untreated seeds or, for a g. Filing and Examination Foe (\$2,450), made payable to DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY YES If "yes," answer items 18 and 19 below!  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY GENERATIONS?  YES NO  HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY GENERATIONS?  YES If "yes," give names of countries and dates!  United States March 1998  The applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) declare that a viable sample of basic seed of the applicant(s) is a tuber propagated variety a tissue culture will the undersigned applicant(s) is a tuber propagated variety a tissue culture will the undersigned applicant(s) is a tuber propagated variety a tissue culture will the undersigned applicant(s) is a tuber propagated variety a tissue culture will the undersigned applicant(s) is a tuber propagated variety a tissue culture will the undersigned applicant(s) is a tuber propagated variety a tissue culture will the undersigned applicant(s) is a tuber propagated variety a tissue culture will the undersigned applicant(s) is a tuber propagated variety a tissue culture will the undersigned applicant(s) is a tuber propagated variety a tissue culture will the undersig	TTED (Follow instructions on reverse)  THED (Follow instructions on reverse)  Treasurer of the United States* (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  NO at *no,* go:  BE LIMITED AS TO NUMBER OF  NO  Veriety will be furnished with application are be deposited in a public repesitory and main reproduced or tuber propagated plant variety section 42 of the Plant Variety Protection Accorpardize protection and result in penalties.	A CLASS OF CERTIFIED SEED? (See Section item 20)  IF "YES" TO ITEM 18, WHICH CLASSES  FOUNDATION REGISTERS R SALE, OR MARKETED IN THE U.S. OR COntained for the duration of the certificate.  Y, and believe(s) that the variety is new, dient.	16. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  OF PRODUCTION BEYOND BREED  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIT A. Distribution of the Variety b. Described A. Origin and Breeding History of the Variety b. Described B. Statement of Distinctness c. Described B. Statement of Distinctness c. Described B. Statement of Distinctness c. Described B. Additional Description of the Variety d. Exhibit B. Statement of the Basis of the Applicant's Own f. Double C. Distribution of the Variety c. Described B. Statement of the Basis of the Applicant's Own f. Distinct Sample 12,500 viable untreated seeds or, for the Color of Sample 12,500 viable untreated seeds or, for the Color of This Parameter of the Sample of Sample 19 below!  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY OF SET 1998 D.  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY OF A HYBRID PRODUCED FROM THE VAR	TTED (Follow instructions on reverse)  THED (Follow instructions on reverse)  Treasurer of the United States" (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  NO at "no," go is  BE LIMITED AS TO NUMBER OF 19.  THE BEEN RELEASED, USED, OFFERED FOR 19.  NO  Veriety will be furnished with application are be deposited in a public repository and main reproduced or tuber propagated plant variety section 42 of the Plant Variety Protection Accorpardize protection and result in penalties.	A CLASS OF CERTIFIED SEED? (See Section item 20)  IF "YES" TO ITEM 18, WHICH CLASSES  FOUNDATION REGISTERS R SALE, OR MARKETED IN THE U.S. OR COntained for the duration of the certificate.  Y, and believe(s) that the variety is new, dient.	16. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  OF PRODUCTION BEYOND BREED  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIT A. District of the Variety b. Described A. Origin and Breeding History of the Variety b. Described B. Statement of Distinctness c. Described B. Statement of Distinctness c. Described B. Statement of Distinctness c. Described B. Statement of the Basis of the Applicant's Owner of Exhibit B. Statement of the Basis of the Applicant's Owner of Exhibit E. Statement of the Basis of the Applicant's Owner of the Variety of Exhibit E. Statement of the Basis of the Applicant's Owner of the Variety of Exhibit E. Statement of the Basis of the Applicant's Owner of the Variety of Exhibit E. Statement of the Basis of the Applicant's Owner of the Variety of Filing and Examination Foe (\$2,450), made payable to cooper the Applicant Specify That SEED OF THIS VARIETY OF SECOND THE SPECIFY THAT SEED OF THIS VARIETY OF THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY OF THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY OF THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY OF THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY OF A HYBRID PRODUCED FROM THE VARIETY OF A HYBRID PRODUCED FR	TTED (Follow instructions on reverse)  THED (Follow instructions on reverse)  Treasurer of the United States" (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  NO at "no," go is  BE LIMITED AS TO NUMBER OF 19.  THE BEEN RELEASED, USED, OFFERED FOR 19.  NO  Veriety will be furnished with application are be deposited in a public repository and main reproduced or tuber propagated plant variety section 42 of the Plant Variety Protection Accorpardize protection and result in penalties.	A CLASS OF CERTIFIED SEED? (See Section item 20)  IF "YES" TO ITEM 18, WHICH CLASSES    FOUNDATION   REGISTERS R SALE, OR MARKETED IN THE U.S. OR COntained for the duration of the certificate.  Y, and believe(s) that the variety is new, dient.	15. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  OF PRODUCTION BEYOND BREED!  THER COUNTRIES?
Crop & Soil Environmental Scient Virginia Polytechnic Institute Blacksburg, VA 24061-0404  CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIT A. Digin and Breeding History of the Variety B. Exhibit A. Origin and Breeding History of the Variety B. Exhibit B. Statement of Distinctness C. Exhibit C. Objective Description of the Variety C. Exhibit C. Objective Description of the Variety C. Exhibit E. Statement of the Basis of the Applicant's Own f. Voucher Sample 12,500 viable untreated seeds or, for a composite of the Composite of the Polyten Sample 12,500 viable untreated seeds or, for a composite of the Polyten Sample 12,500 viable untreated seeds or, for a composite of the Polyten Sample 12,500 viable untreated seeds or, for a composite of the Polyten Sample 19 Filing and Examination Foe (\$2,450), made payable to the Sample of this variety of the Sample of the Sample of the Sample of the Variety Senerations?  DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY OF A HYBRID PRODUCED FROM THE VARIETY OF A HYB	TTED (Follow instructions on reverse)  THED (Follow instructions on reverse)  Treasurer of the United States" (Mail to PV  BE SOLD BY VARIETY NAME ONLY, AS A  NO at "no," go is  BE LIMITED AS TO NUMBER OF 19.  THE BEEN RELEASED, USED, OFFERED FOR 19.  NO  Veriety will be furnished with application are be deposited in a public repository and main reproduced or tuber propagated plant variety section 42 of the Plant Variety Protection Accorpardize protection and result in penalties.	A CLASS OF CERTIFIED SEED? (See Section item 20)  IF "YES" TO ITEM 18, WHICH CLASSES  FOUNDATION REGISTERS R SALE, OR MARKETED IN THE U.S. OR COntained for the duration of the certificate.  And believe(s) that the variety is new, dient.  E OF APPLICANT (Owner(s))	15. FAX (include area code)  540-231-3431  and in a public repository)  on 83(a) of the Plant Variety Protect  OF PRODUCTION BEYOND BREED!  THER COUNTRIES?

#### Exhibit A

#### Origin and Breeding History of MFS-553

MFS-553 originated from a single F<sub>5</sub> plant from the cross of Essex x Camp. The cross was made in the field in 1988 and the F<sub>1</sub> was grown in the field in 1989. The F<sub>2</sub> was grown in the field in 1990 and a few pods were harvested from each plant. The harvested seeds were threshed and screened through a 14/64" round hole screen and the seeds passing through the screen were planted and grown in the greenhouse in the winter of 1990-91. Harvested seeds were planted as a bulk F4 population in the field and a sample of pods from most of the plants was hand-picked and threshed. These seeds were screened and those that passed through a 14/64" screen were planted in bulk in the field in 1992. Individual plants from this population were threshed and planted in progeny rows in 1993. From the 106 rows, 26 were selected for apparent agronomic potential as well as for uniformity in flower, pubescence and pod color, plant height and overall appearance. After harvest, 11 lines were discarded for having either imperfect black hila or seed size greater than 9 g/100 seeds. The remaining lines were grown in a preliminary yield test at one location in 1994. V93-0386 was among those lines and was selected to be grown in the advanced yield test at four locations in 1995. Based on available data, V93-0386 and three other lines were chosen to grow seed increases in Costa Rica in the winter of 1995-96. The returned seed was planted in 1996 on about 0.2 acre at Mt. Holly, VA. The plot was rogued for any off-type plants and the seed harvested was considered Breeder Seed. The first Foundation Seed was produced in 1997.

#### Exhibit B

MFS-553 is most similar to Camp, another maturity group V variety with small seeds and narrow leaves. However, there are two major traits by which the two varieties differ, the primary one being plant height. MFS-553 has averaged 69 cm in height while Camp has averaged only 58 cm, a difference of 11 cm. Also, seed size of MFS-553 is larger than Camp. Averaged over recent field tests, MFS-553 seed size has been 8.0 gm/100 vs. 7.2 gm/100 for Camp, a statistically significant difference at P=.001.

Page 1 of

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN TRITESTORY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C

## OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Virginia Agricultural Experiment Statio	1	-MFS-553
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip		
College of Ag. and Life Sciences VPI & SU Blacksburg, VA 24061		FOR OFFICIAL USE ONLY PVPO NUMBER 9900135
Choose the appropriate response which characterizes the in your answer is fewer than the number of boxes provid Starred characters ** are considered fundamental to an adwhen information is available.  1. SEED SHAPE:	ed. Diace a zero in the first how w	nen number is 0 or less /e a
1 = Spherical (L/W, L/T, and T/W ratios = < 1.2) 3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)	W T T 2 = Spherical Flattened (I	L/W ratio > 1.2; L/T ratio = < 1.2) ./T ratio > 1.2; T/W > 1.2)
2. SEED COAT COLOR: (Mature Seed)  1 = Yellow 2 = Green 3 = Brown	and the second of the second o	pecify)
3. SEED COAT LUSTER: (Mature Hand Shelled Seed)		and the second s
	bsoy'; 'Gasoy 17')	en de la companya de La companya de la co
4. SEED SIZE: (Mature Seed)  8 Grams per 100 seeds		
7 5. HILUM COLOR: (Mature Seed)  2 1 = Buff 2 = Yellow 3 = Brown	4 = Gray 5 = Imperfect Black	A STATE OF THE STA
6. COTYLEDON COLOR: (Mature Seed)		
1 = Yellow 2 = Green	to the second of the second	
7. SEED PROTEIN PEROXIDASE ACTIVITY:  1 = Low 2 = High		
8. SEED PROTEIN ELECTROPHORETIC BAND:		
1 = Type A (SP1 <sup>a</sup> ) 2 = Type B (SP1 <sup>b</sup> )	N.	in the season of
9. HYPOCOTYL COLOR:		No. 10 Personal Property of the Control of the Cont
1 = Green only ('Evans'; 'Davis') 2 = Green wi 3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71' 4 = Dark Purple extending to unifoliate leaves ('Hodgson'	th bronze band below cotyledons ("Wo ) ; 'Coker Hampton 266A")	oodwarth'; 'Tracy')
10. LEAFLET SHAPE:  1 1 = Lanceolate 2 = Oval 3 = Ovate	4 = Other (Specify)	

FORM LMGS-470-57 (6-83)

(Edition of 2-82 is obsolete.)

•	I. LEF	AFLET SIZE:		4		11/4 G V 18	•		
	2	1 = Small ('Arnsoy 71'; 'A5312 3 = Large ('Crawford'; 'Tracy')	1986 1986 1986 - Handard Handard	2 = <b>M</b> ed	ium ('Corsoy	79'; 'Gasoy	17')	·	
				200 D 200	133.32				
1	2. LEA	F COLOR:						Age of the State	* * * * * * * * * * * * * * * * * * * *
general to	2	1 = Light Green ('Weber'; 'York 3 = Dark Green ('Gnome'; 'Trac	ර) syd	2 = <b>M</b> ed	ium Green (*C	Corsoy 79'; 'B	raxton'}		
<b>★</b> 13	. FLO	WER COLOR:	<u> </u>			<del></del>			
ner sinen grijak	2	1 = White 2 = Purp	j Ole (k. 1909) Waliona	3 = White w	ith purple thr	oat		Grander (1997) State of the State of the Sta	
<b>★</b> 14	POD	COLOR:		<del> </del>	t	- <del>19</del> / 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	<del></del>	<u> </u>	<del></del>
til.	1	1 = Tan 2 = Brown	•••	Black		ing to Byblica Liver of Albertain	teda	· And	Yes experience
<b>★</b> 15	PLAN	IT PUBESCENCE COLOR:				· ·	<u>3</u>		
	1	1 = Gray 2 = Brown (	** ***	ender som		* 1   W.   W   128	in the second se	in the Armania (1997) I mark by and the	
16.	PLAN	T TYPES:	en	tank in the part of	e de la companya de l	to a company of	arer e	and the second second	n de de Servicio de la compansión Servicio de la compansión
	1.	1 = Slender ('Essex'; 'Amsoy 71' 3 = Bushy ('Gnome'; 'Govan')	)	2 = Intern	nediate ('Amo	or'; 'Braxton	7	en e	
<u> </u>	D1 A 84	Т НАВІТ:						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
18.	MATIL	1 = Determinate ('Gnome'; 'Brax: 3 = Indeterminate ('Nebsoy'; 'Imp	ton') proved Pelican')	, 2 = Semi-C	Veterminate (*	Will')	//4 e - Eurit		
	<del></del>					-		go kaj lijiho kaje i os	
. 4.	<u>  8  </u>	1 = 000 2 = 00 9 = VI 10 = VII	3 = 0 11 = VIII	4 = I 12 = IX	5 = II 13 = X	6≖ III	7 = IV	8 <b>= ∀</b> -∩	and the second of the second o
19.	DISEA	SE REACTION: (Enter 0 = Not Te	rted; 1 = Suscept	ible: 2 = Re	istant)		<u> </u>	<u>taning na kaominina dia kaomi</u>	S
*		ERIAL DISEASES:				. <b> </b>		i kanali Nga Pitangan ay n	ander Lander († 1865) 1800 - Mary Mary Marier, fransk fransk 1801 - Mary Mary Marier, fransk f
•		Bacterial Pustule (Xanthomonas po	haseoli var. sojen	sis)	•			* * * 1	e de Alberta
* *		Bacterial Blight (Pseudomonas glyo Wildfire (Pseudomonas tabaci)	cinea)	• .		-51 E 9	8- NAL	66.	
	L <u>∵</u> FUNGA	L DISEASES:			•				
*	0	Brown Spot (Septoria glycines)				Dand- ED	SMA-AO	sa di di	i Line
		Frogeye Leaf Spot (Cercospora soji	ina)		•				
*		Race 1 Race 2	Race 3	R	ace 4	Race 5	o	ther (Specify)	en de la companya de La companya de la co
	띹	Target Spot (Corynespora cassiicola			e de la companya della companya de la companya della companya della companya della companya de la companya della companya dell				
	의	Downy Mildew (Peronospora trifoli	orum var. mansh	urica)	and the second		• • •		
*   *	0	Powdery Mildew (Microsphaera diff	usa)						4. A
*	0	Brown Stem Rot (Cephalosporium s	regatum)					*	1
, i	0	Stem Canker (Diaporthe phaseoloru	m me eeuliveed			•			-

FORM LMGS-470-57 (6-83)

19/ DISEASE REACT	ION: (Enter 0 = Not Tested; 1 = Susceptible;	2 = Resistant) (Continued)	reactive reserve in the reserve section in the reserve and the
1 1	ASES: (Continued)		The second of th
★ 0 Pod and S	stem Blight <i>(Diaporthe phaseolorum var; soja</i> e		and the state of t
	ed Stain (Cercospora kikuchii)	Market in the state of the stat	9900135
	nia Root Rot (Rhizoctonia solani)		
	nora Rot (Phytophthora megasperma var. soja		
★ O Race 1			
Race 8	Race 2 U Race 3	O Race 4 O Race	5 0 Race 6 0 Race 7
ιν.	O Race 9 O Other (Specify		The Control of the Co
VIRAL DISEASE	the state of the s	. The second will define a	paga makamban makemban Najak sahiri d
	(Tobacco Ringspot Virus)	And the second of the second second	Services (Co. P. V.) in any terms
Yellow Mo	saic (Bean Yellow Mosaic Virus)	and the second of the second o	
Cowpea Mc	osaic (Cowpea Chlorotic Virus)	•	
Pod Mottle	(Bean Pod Mottle Virus)		
★ 1 Seed Mottle	e (Soybean Mosaic Virus)		
NEMATODE DISI	EASES:		
Soybean Cy	rst Nematode (Heterodera glycines)		
Race 1	0 Race 2 0 Race 3	Race 4 O Other	(Specify)
O Lance Nema	atode (Hoplolaimus Colombus)		
Southern Ro	pot Knot Nematode (Meloidogyne incognita)		
★ 0 Northern Ro	oot Knot Nematode (Meloidogyne Hapla)	•	
O Peanut Root	t Knot Nematode (Meloidogyne arenaria)		
Reniform Ne	ematode (Rotylenchulus reniformis)		
<u> </u>	EASE NOT ON FORM (Specify):		
			•
20. PHYSIOLOGICAL RE	ESPONSES: (Enter 0 = Not Tested; 1 = Susc	eptible; 2 = Resistant)	
★ U Iron Chlorosi	is on Calcareous Soil		
Other (Specif	fy)		
21. INSECT REACTION:	(Enter 0 = Not Tested; 1 = Susceptible; 2 =	Resistant)	
O Mexican Bean	Beetle (Epilachna varivestis)	And the second s	
O Potato Leaf H	lopper (Empoasca fabae)	•	•
O Other (Specifi	v)		
	ARIETY MOST CLOSELY RESEMBLES TH	AT CIPALITES	
CHARACTER	NAME OF VARIETY		T
Plant Shape	Camp	CHARACTER Seed Coat Luster	NAME OF VARIETY Camp
Leaf Shape	Camp	Seed Size	Camp
Leaf Color	Camp	Seed Shape	Camp
Leaf Size	Camp	Seedling Pigmentation	
	was a same as a same	e e sa	Camp
FORM LMGS-470-57 (6-83)			The second control to

### 23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF PLANT DAYS LODGIN		CM PLANT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100	No.
	MATURITY	SCORE	HEIGHT	CM Width	CM Length	% Protein	% Oil	SEEDS	SEEDS/ POD
Submitted MFS-553	150	2.5	69	18.1	5.8	42.7	19.6	8.0	·
Name of Similar Variety Camp	4	2.0	58	17.0	5.4	42.9	19.2	7.2	

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
- 3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A<sub>2</sub> in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
- 4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

3- NAC 66.

OS WA-Ade



College of Agriculture and Life Sciences Blacksburg, Virginia 24061 (540) 231-6305 Fax: (540) 231-3431

September 19, 2001

Dr. Jeffrey L. Strachan Plant Variety Protection Office NAL Bldg., Rm. 401 10301 Baltimore Blvd. Beltsville, MD 20705-2351

Dear Dr. Strachan:

This is in response to your request for additional data comparing 'MFS-553' with 'Camp' for plant height and seed size. Both cultivars were grown in the same experiments in 1997, 1998, and 1999. Four Virginia locations with three replications were grown in each year. The table below is a summary of the performance of both cultivars in each year and overall.

en de le englaffikker i kløsten folklindligt mel morte dette trett et en els størtele i el

19 an 19 19 19 19 19 19 19 19 19 19 19 19 19		Average pla	ant height (cm)	
<u>Cultivar</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	3-yr. avg.
Camp	52.8	55.9	59.7	56.1
MFS-553	64.5	69.6	69.6	68.1
LSD .05	3.3	3.9	3.2	2.0
		Average seed s	size (g/100 seeds)	
Camp	7.4	7.6	7.7	7.6
MFS-553	8.4	8.7	8.5	8.5
LSD .05	0.2	0.4	0.2	0.2

Although there is some variation from year to year, I believe the differences between Camp and MFS-553 are very consistent. MFS-553 is typically about 12 cm taller than Camp and its seeds are about one g per 100 seeds larger than Camp. The differences each year and overall for both traits are several times the LSD for the 5% level of probability. A standard ANOVA using only these two entries over all tests provided F values for entries of 98.3 and 85.2 for plant height and seed size, respectively. Both of these have P values of less than 0.0001.

durantification in the file of the file of the file of the file of the order of the file of the company of the

These analyses are very typical of those used by plant breeders, and I believe the results make it very clear that MFS-553 and Camp could be readily distinguished from each other when grown side-by-side in the field.

I believe these data should be adequate to satisfy your request. If there are any further questions, please don't hesitate to contact me.

Sincerely,

G. R. Buss,

Professor

jab

RÉPRODUCE LOCALLY Include form number and edition date on al	I reproductions.	ORM APPROVED - OMB No. 0581-0059
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E  STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to det certificate is to be issued (7 U.S.C. 2-confidential until the certificate is issued.)	ermine if a plant variety protection 421). The information is held
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3: VARIETY NAME
Virginia Tech Intellectual Properties, Inc.	OR EXPERIMENTAL NUMBER	Section Control to the Control of th
Properties, Inc.	V93-0386	MFS-553
4. ADDRESS (Street and No. or R.F.D. No. City. State, and ZIP, and Country) 1872 Pratt Drive, Suite 1625	5. TELEPHONE (tricking area code)	6. FAX (Include area code)
Blacksburg, VA 24060	540-951-9374	540-951-5292
	7, PVPO NUMBER	de la companya de la
8. Does the applicant own all rights to the variety? Mark an "X" in th		
9. is the applicant (individual or company) a U.S. National or a U.S. t	based company? If no, give name of c	country X YES NO
10. Is the applicant the original owner?	If no, please answer one of the fol	llowing:
a. If the original rights to variety were owned by individual(s), is	(are) the original owner(s) a U.S. Nation	al(e)?
<b>&gt;</b>		al(a):
X YES NO	If no, give name of country	
b. If the original rights to variety were owned by a company(ies)	, is (are) the original owner(s) a U.S. ba	sed company?
X YES NO	If no, give name of country	
11. Additional explanation on ownership (If needed, use the reverse	for extra space):	
· · · · · · · · · · · · · · · · · · ·	ior oxida apaco).	• •
PLEASE NOTE:		
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:	
If the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords the	erson must be a U.S. national, national fithe U.S. for the same genus and speci	of a UPOV member country, or ies.
<ol><li>If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a o genus and species.</li></ol>	yed the original breeder(s), the company country which affords similar protection	y must be U.S. based, owned by to nationals of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must m	neet one of the above criteria.
The original breeder/owner may be the individual or company who dir Act for definitions.	rected the final breeding. See Section 4	11(a)(2) of the Plant Variety Protection
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor,	and a person is not required to respond to a collection	or of Information unless it displays a volid OMP

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 6 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W. Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.